

FIG. 1  
(Prior Art)

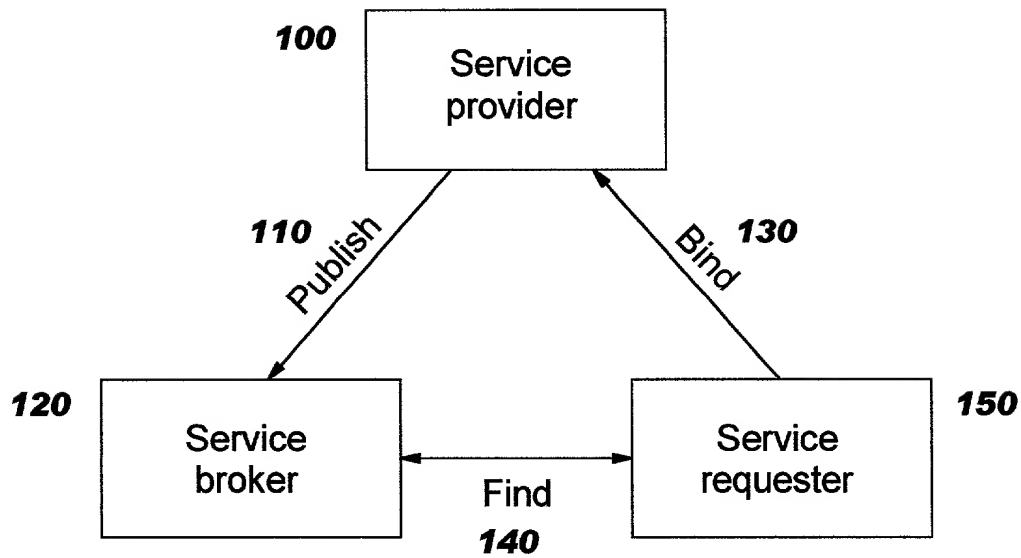


FIG. 2  
(PRIOR ART)

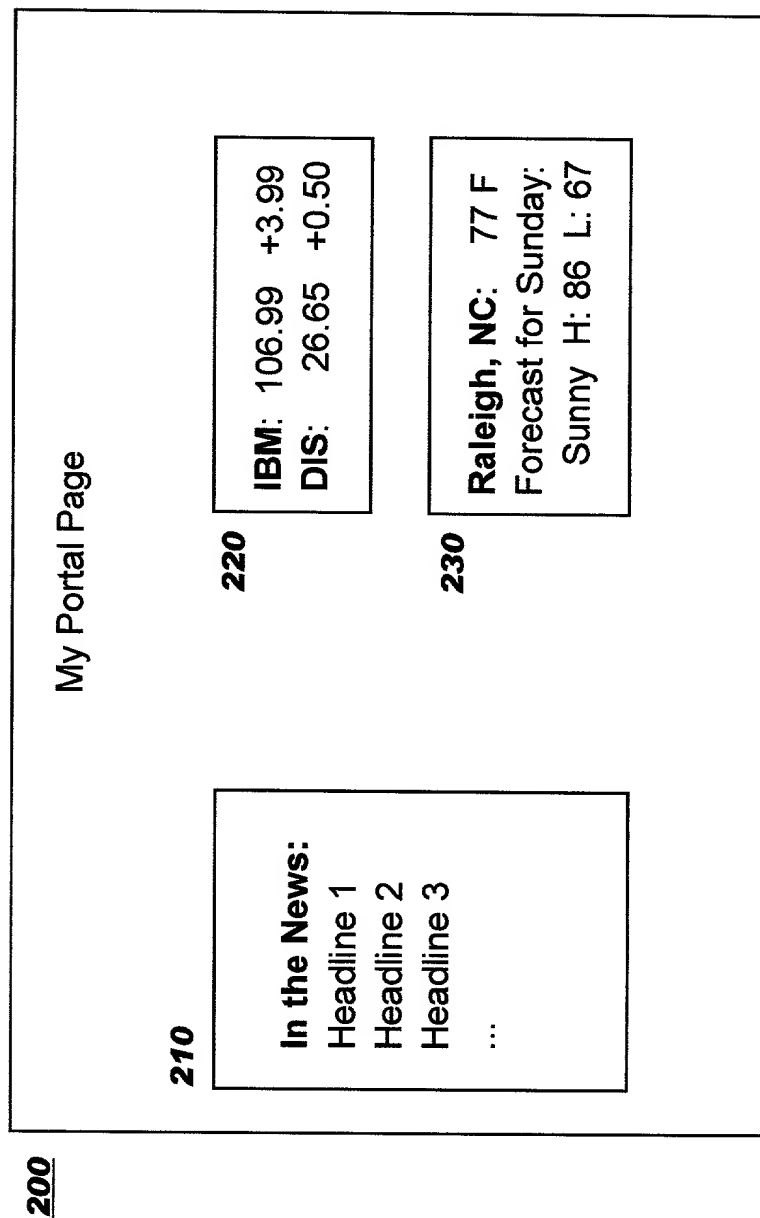
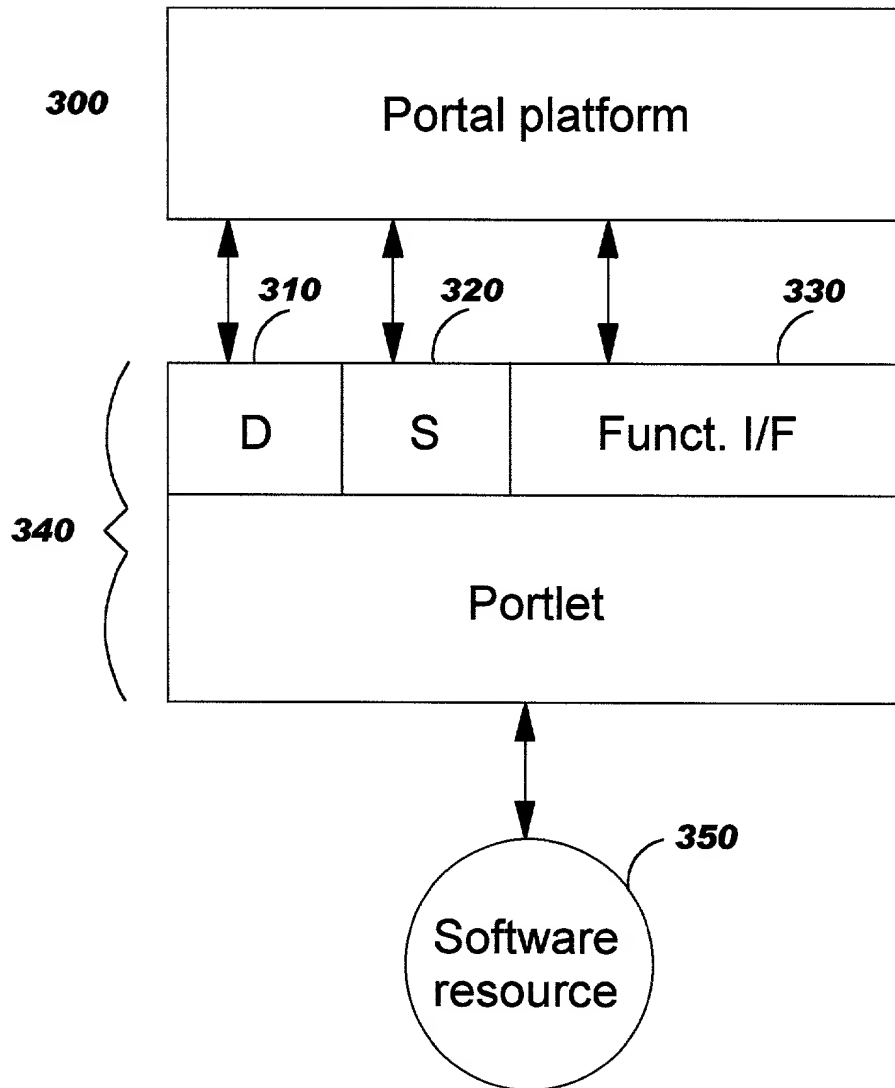


FIG. 3



## FIG. 4A

400

```
<?xml version="1.0"?>
<definitions
410   name="Deployment"
      targetNamespace="http://portal-definitions/Deployment.wsdl"
      xmlns:tns="http://portal-definitions/Deployment.wsdl"
      xmlns:wsfl="http://schemas.xmlsoap.org/wsfl/"
      xmlns="http://schemas.xmlsoap.org/wsdl/">

420   <message name="getDisplayNameInput">
        <part name="displayNameInput" element="xsd:nil"/>
    </message>
    <message name="getDisplayNameOutput">
        <part name="displayNameOutput" element="xsd:string"/>
    </message>
    <message name="getDisplayIcon16x16Input">
        <part name="displayIcon16x16Input" element="xsd:nil"/>
    </message>
    <message name="getDisplayIcon16x16Output">
        <part name="displayIcon16x16Output" element="xsd:image"/>
    </message>
    ...

430   <portType name="DeploymentPortType">
        <operation name="getName">
            <input message="tns:getDisplayNameInput"/>
            <output message="tns:getDisplayNameOutput"/>
        </operation>
        <operation name="getDisplayIcon16x16">
            <input message="tns:getDisplayIcon16x16Input"/>
            <output message="tns:getDisplayIcon16x16Output"/>
        </operation>
        ...
    </portType>
</definitions>
```

## FIG. 4B1

FIG. 4B1

FIG. 4B2

FIG. 4B

450

460

```
<?xml version="1.0"?>
<definitions
  name="System"
  targetNamespace="http://portal-definitions/System.wsdl"
  xmlns:tns="http://portal-definitions/System.wsdl"
  xmlns:wsfl="http://schemas.xmlsoap.org/wsfl/"
  xmlns="http://schemas.xmlsoap.org/wsdl/">
```

470

```
<types>
  <schema xmlns="http://www.w3.org/2000/10/XMLSchema">
    <element name="Event">
      <complexType>
        <all>
          <element name="uuid" type="xsd:string"/>
          <element name="type" type="xsd:string"/>
          <element name="when" type="xsd:date"/>
        </all>
      </complexType>
    </element>
  </schema>
</types>
```

...

FIG. 4B1

## FIG. 4B2

```
480 <message name="logEventReceive">
      <part name="logEventInput" element="tns:Event"/>
    </message>
    <message name="reportInput">
      <part name="reportUsageResource" element="xsd:string"/>
      <part name="reportUsageQuantity" element="xsd:integer"/>
    </message>
    <message name="reportOutput">
      <part name="reportReturnCode" element="xsd:string"/>
    </message>
    ...
490 <portType name="SystemPortType">
      <operation name="logEvent">
        <input message="tns:logEventReceive"/>
      </operation>
      <operation name="reportUsage">
        <input message="tns:reportInput"/>
        <output message="tns:reportOutput"/>
      </operation>
      ...
    </portType>
    ...
  </definitions>
```

FIG. 4B2

FIG. 5

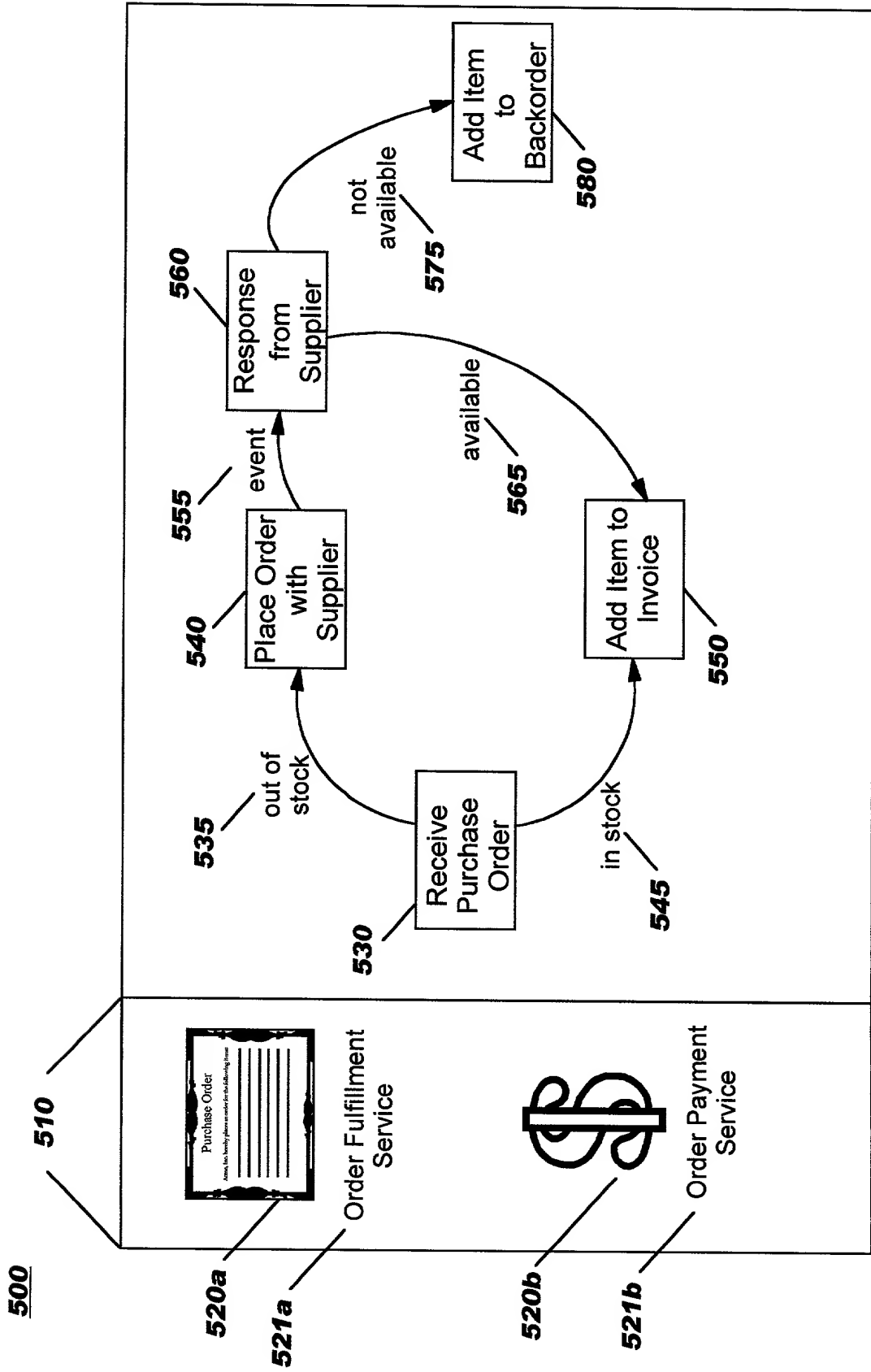


FIG. 6

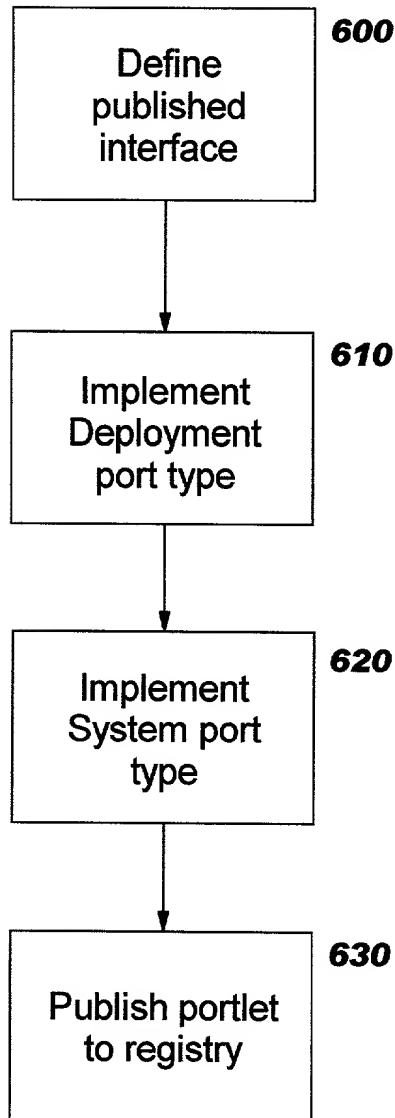




FIG. 7

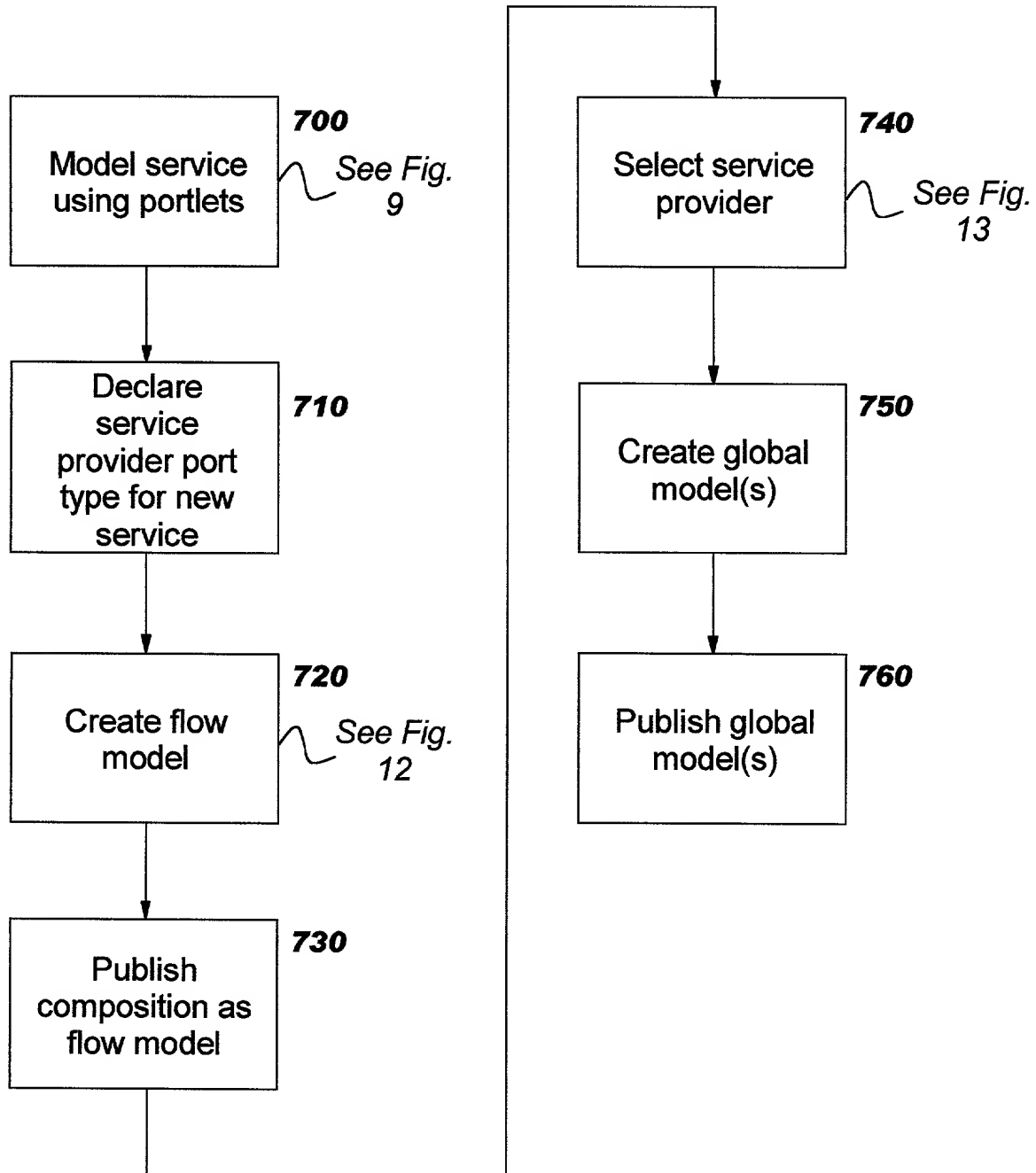


FIG. 8

**800**

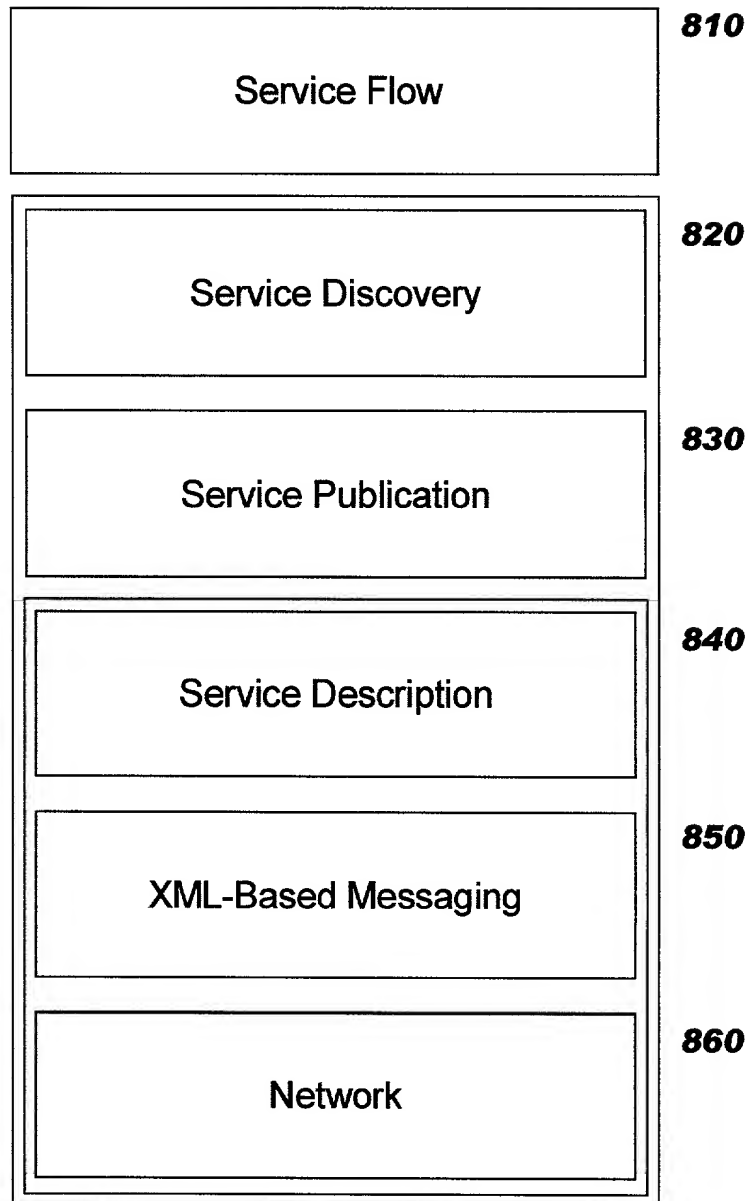


FIG. 9

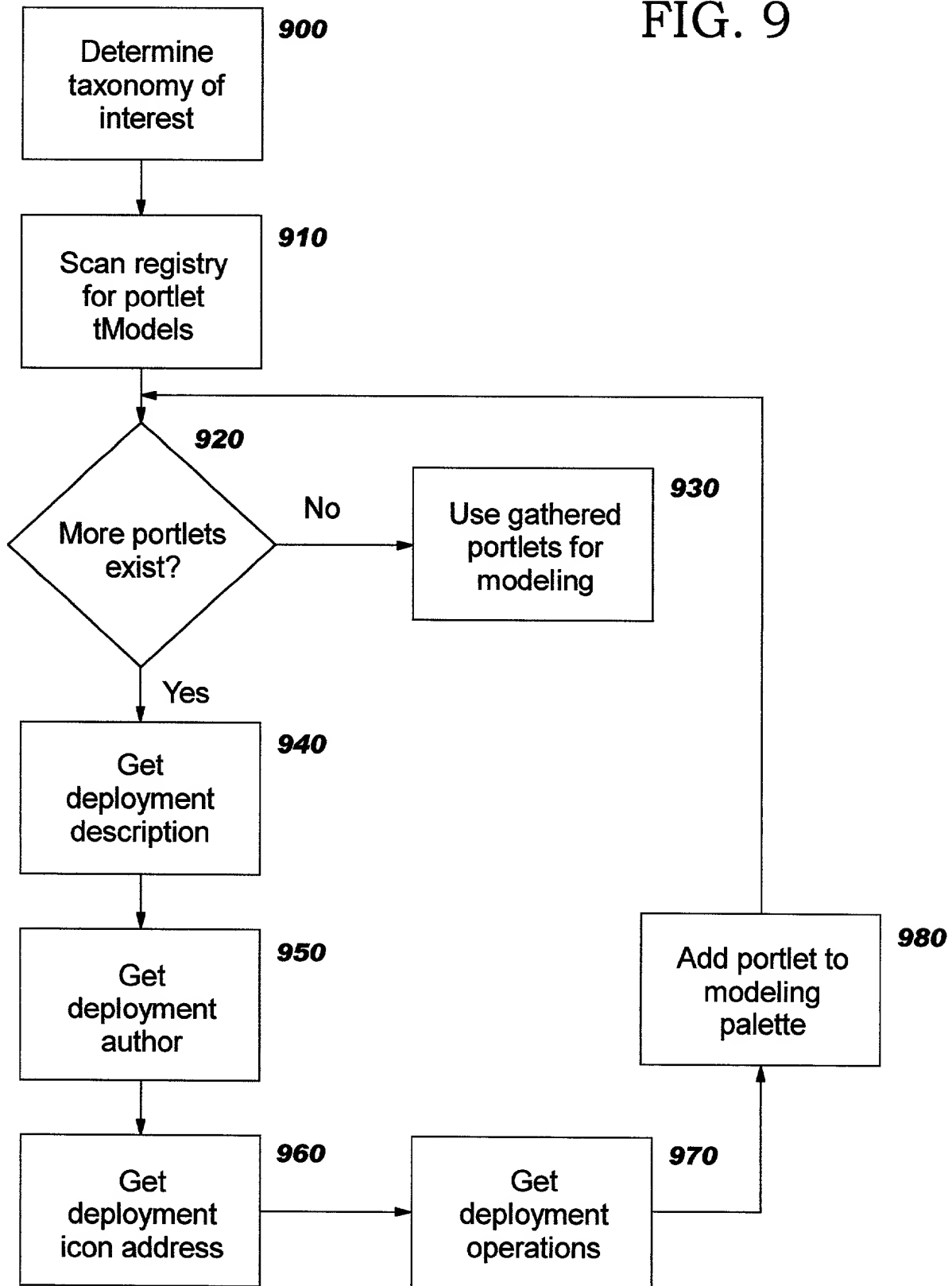


FIG. 10

1000

```
<tModel authorizedName="..."
  operator="..."
  tModelKey="uuid:12-4-4-8">
  <name>System Service</name>
  <description xml:lang="en">
    WSDL for System Definition.
  </description>
  <overviewDoc>
    <description xml:lang="en"
      WSDL Source Document.
    </description>
    <overviewURL>
      http://portal-definitions/System.wsdl
    </overviewURL>
  </overviewDoc>
  <categoryBag>
    <keyedReferece tModelKey="uuid:12-4-4-8"
      keyName="uddi-org:types"
      keyValue="wsdlSpec"/>
  </categoryBag>
</tModel>
```

1010

1020

"B34550" 1010 1020

## FIG. 11A

public integer processCreditTransaction  
(Integer cardNumber, float purchaseAmount, date expirationDate)

## FIG. 11B

public Boolean acceptCreditCard  
(String accountNumber, string cardHolderName,  
float currentAmount, float outstandingBalance, date expirationDate)

## FIG. 11C

public Boolean creditCardService  
(String accountNumber, integer cardNumber,  
string cardHolderName, float amount, float outstandingBalance,  
date expirationDate)

FIG. 12

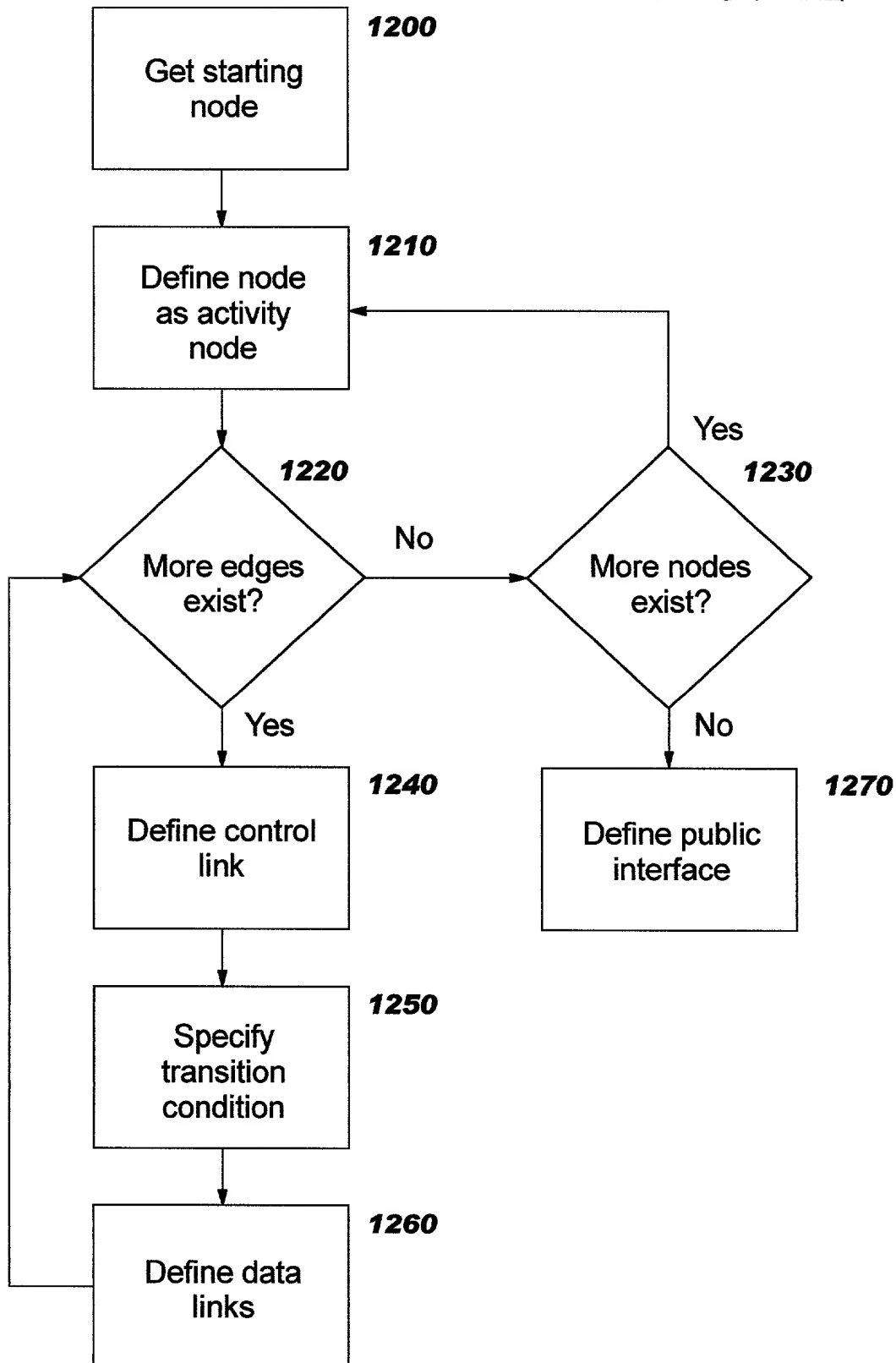


FIG. 13

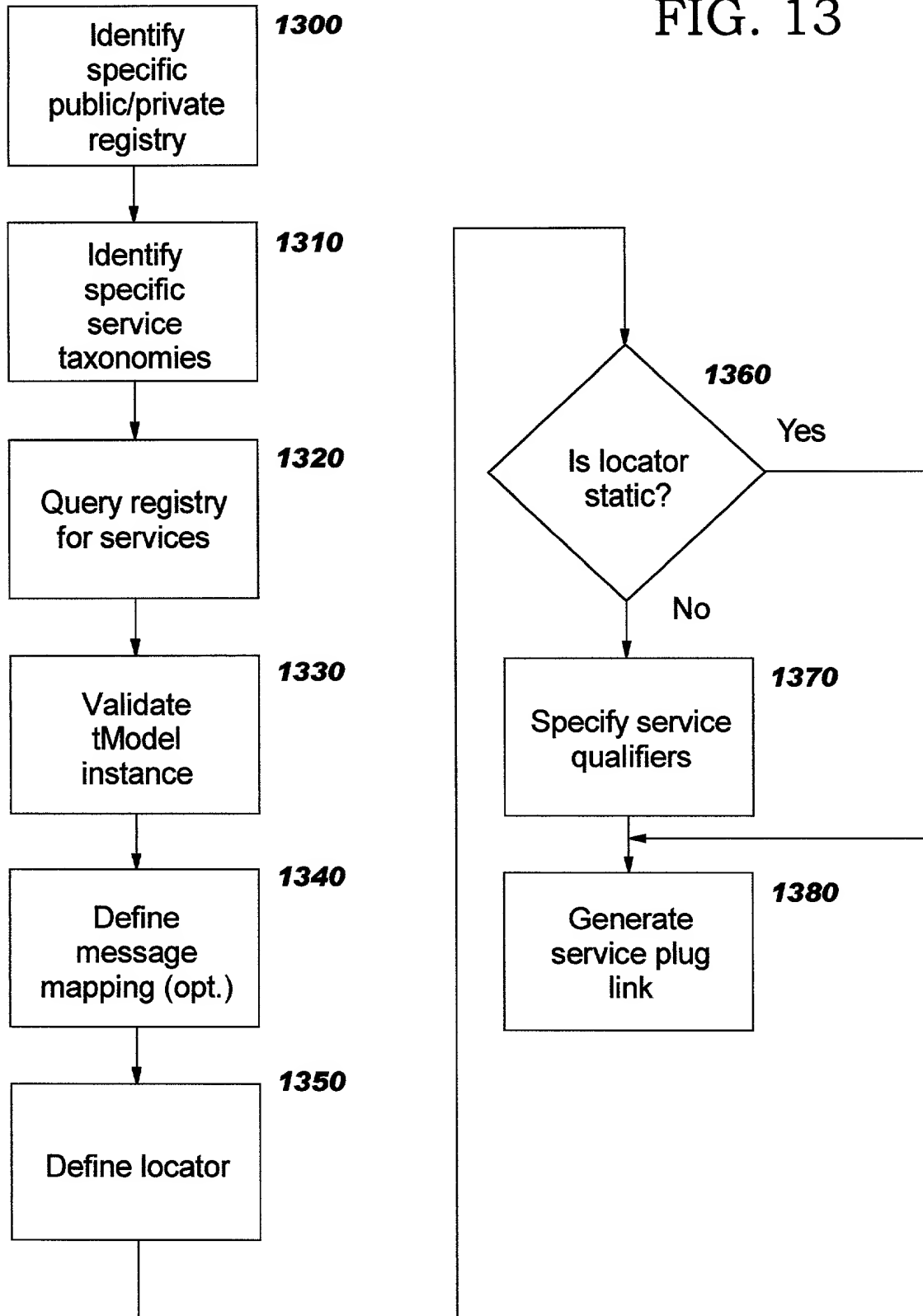


FIG. 14

**1400**

**1410**

```
<plugLink>
  <source serviceProvider="serviceSend"
    portType="sendPortType"
    operation="send"/>
  <target serviceProvider="serviceReceive"
    portType="receivePortType"
    operation="receive"/>
  <map sourceMessage="sendForm"
    targetMessage="receiveForm"/>
  <locator type="static"
    service="TheServiceReceiver.com"/>
</plugLink>
```



FIG. 15A

**1500**

```
<result>
  <firstName>Mike</firstName>
  <lastName>Wanderski</lastName>
</result>
```

FIG. 15B

**1520**

```
<map sourceMessage="theSourceMessage"
  targetMessage="submitNameMessage"
  sourcePart="firstName"
  targetPart="name"/>
```

FIG. 15C

```
<map sourceMessage="wsSourceMessage"
  targetMessage="submitNameMessage"
  converter="urn:thePortalURN"/>
```

FIG. 16

**1600**

**1610**

From	To	Convert-let
portlet-A	portlet-B	A-to-B
portlet-A	portlet-C	A-to-C
portlet-B	portlet-Z	B-to-Z
...	...	...

105760-832560

FIG. 17

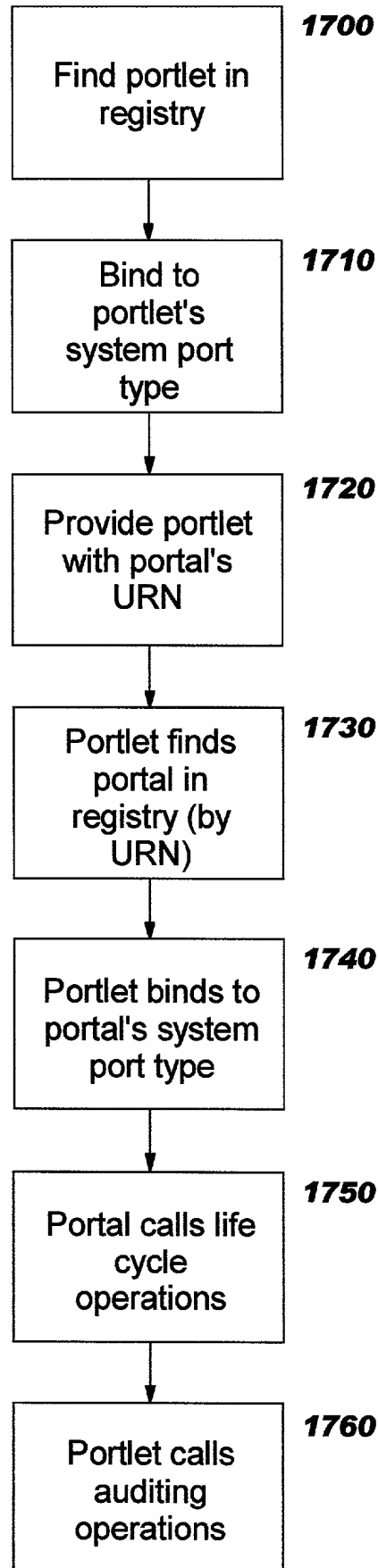


FIG. 17

FIG. 18

